

Title (en)

OPERATION STATUS DIAGNOSING DEVICE FOR EXTERNAL CONTROL MEANS

Title (de)

VORRICHTUNG ZUR DIAGNOSE DES BETRIEBSSTATUS FÜR EXTERNE STEUERUNGSMITTEL

Title (fr)

DISPOSITIF DE DIAGNOSTIC D'ÉTAT DE FONCTIONNEMENT POUR SYSTÈME DE COMMANDE EXTERNE

Publication

EP 2237056 A4 20140205 (EN)

Application

EP 09700408 A 20090109

Priority

- JP 2009050596 W 20090109
- JP 2008005076 A 20080111

Abstract (en)

[origin: EP2237056A1] Provided is an operation status diagnosing device for an external control means, which is enabled by a simple constitution to perform the transmission of the drive status of an external control means constituted of either a relay contact to be activated by an ON/OFF signal or an ON/OFF means made of a semiconductor, and the transmission of a signal indicating the occurrence of troubles such as disconnection or shorting of a wiring line and the transmission of an electric power by a common means, thereby to prevent the rise of a production cost due to the increase in a parts count or the complexity of a circuit constitution and to diagnose the transmission of the signal and the soundness of the circuit precisely. The operation status diagnosing device for the external control means is constituted to comprise a second switch circuit for turning ON/OFF an alternating voltage generating means output in response to the drive signal of the external control means, thereby to apply that output to an insulating transformer primary side, a first switch circuit serving as an external control means connected with an insulating transformer secondary side, so that it is turned ON/OFF by the second switch circuit, an external control means operation status detecting circuit connected with the insulating transformer secondary side, so that an electric current flows therethrough when the first switch circuit is ON, and a measuring means connected with the second switch circuit, for measuring the electric current to flow to the insulating transformer primary side.

IPC 8 full level

G01R 31/00 (2006.01); **G01R 31/02** (2006.01); **G01R 31/327** (2006.01)

CPC (source: EP US)

G01R 31/3278 (2013.01 - EP US)

Citation (search report)

- [A] US 4977478 A 19901211 - POWELL WILLIAM E [US]
- [A] US 3787708 A 19740122 - HOBSON C
- [A] GB 2090002 A 19820630 - MITSUBISHI ELECTRIC CORP
- [A] GB 2392990 A 20040317 - VISTEON GLOBAL TECH INC [US]
- See references of WO 2009088099A1

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CN112219124A; EP2933921A1; US10374597B2; US11774501B2; WO2015159057A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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